

Appl. No. 09/883,406
Amdt. dated September 29, 2004
Reply to Office Action of June 1, 2004

REMARKS

Applicants respectfully request the Examiner to enter the amendments, to reconsider all objections and rejections (if any), and to allow this application.

Applicants acknowledge the Examiner thorough review of this application and her careful consideration of the inventions presented for examination.

Amendment to claim 1

Applicants amended claim 1 to recite "(A) a polymer that contains a maleimido group and an ethylenically unsaturated group on a side chain thereof" and similarly amended claim 12. Applicants respectfully submit that the amended claims finds basis throughout the original specification. Applicants direct attention, for instance, to page 12, line 21 through page 13, line 25, page 14, line 2 through page 14, line 14, and page 22, line 11 through page 22, line 25. It is respectfully submitted that the methods (1)-(7) exemplified in the specification may be suited for producing a component (A) in which the polymer contains a maleimido group and an ethylenically unsaturated group on a side chain thereof. Applicants respectfully submit that the polymers obtained according to the Examples of the present specification have a maleimido group and an ethylenically unsaturated group on a side chain thereof. Applicants respectfully direct the Examiner attention to their specification ranging from page 47, line 3 through page 50, line 12.

Applicants Respectfully Traverse the Rejection Under 35 U.S.C. § 102(b).

Claims 1-7, 10-15 and 20-26 define novel inventions over WO98/11152 (Thepot et al).

The present invention as amended above is distinguished from the compound of the Thepot et al. reference.

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According to the Office Action, the Thepot et al. reference allegedly discloses a compound that has a maleimido group and an ethylenically unsaturated group.

Even if, *arguendo*, the compound disclosed in the Thepot et al. reference has an ethylenically unsaturated group, it does not anticipate the claimed inventions. Any such alleged unsaturation is in the polymer chain. The polymer is a so-called internal olefin.

The Thepot et al. reference does **not** describe a polymer that contains an ethylenically unsaturated group on a side chain thereof.

Having established novelty, Applicants respectfully submit their novel claimed inventions would not have been obvious to a person of ordinary skill in the art in view of the Thepot et al. reference.

In determining whether a case of *prima facie* obviousness exists, it is necessary to ascertain whether the prior art teachings would or would not have been sufficient to one of ordinary skill in the art to suggest making the claimed substitution or other molecular modification.¹ In other words, the prior art must provide one of ordinary skill in the art the motivation to make the proposed molecular modifications needed to arrive at the claimed compound.²

¹ See, e.g., In re Jones, 958 F.2d 347, 351, 21 U.S.P.Q.2d (BNA) 1941, 1944 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 731-32, 226 U.S.P.Q. (BNA) 870, 872 (Fed. Cir. 1985) ("In the case before us there must be adequate support in the prior art for the [prior art] ester/[claimed] thioester change in structure, in order to complete the PTO's *prima facie* case and shift the burden of going forward to the applicant."); In re Lalu, 747 F.2d 703, 705, 223 U.S.P.Q. (BNA) 1257, 1258 (Fed. Cir. 1984); and In re Taborsky, 502 F.2d 775, 780, 183 U.S.P.Q. (BNA) 50, 55 (CCPA 1974).

² In re Stemniski, 444 F.2d 581, 586, 170 U.S.P.Q. (BNA) 343, 347 (CCPA 1971), Taborsky, 502 F.2d at 781, 183 U.S.P.Q. at 55, In re Murch, 464 F.2d 1051, 175 U.S.P.Q. (BNA) 89 (CCPA 1972), In re Fay, 347 F.2d 597, 146 U.S.P.Q. (BNA) 47 (CCPA 1965).

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In the present case, the Thepot et al. reference would **not** have provided a person of ordinary skill in the art with the motivation to replace unsaturation in the polymer backbone with an ethylenically unsaturation in a side chain. Upon careful perusal of the Thepot et al. reference, there does not appear to be any teaching that would have motivated the person of ordinary skill in the art to undertake the molecular modifications required to reach Applicants compound. There does not appear to be a suggestion to saturate the polymer backbone and/or to provide an unsaturation on a side chain as described in Applicants' specification and as claimed. Therefore, Applicants respectfully submit that there is no *prima facie* case of obviousness.

The novelty-conferring structural differences are related to beneficial properties associated with the present invention. The present crosslinkable resin composition comprises (A) a polymer that contains a maleimido group and an ethylenically unsaturated group on its side chain. The present composition is capable of exhibiting excellent curability properties. On the other hand, even if, *arguendo*, the Office Action was correct, the structurally dissimilar compound having the internal olefin according to the Thepot et al. reference is inferior in curability versus the present composition.

Without conceding a *prima facie* case of obviousness, Applicants respectfully submit that the claimed inventions can manifest an unexpected result compared to a composition according to the Thepot et al. reference. The Yachi Declaration provides evidence showing a difference in curability between the present invention and the Thepot et al. reference. The Yachi declaration is not signed. A signed copy will be submitted promptly upon receipt by the undersigned counsel.

As mentioned above, *arguendo*, the Thepot et al. reference apparently discloses a compound having an internal olefin, and fails to disclose a compound having an ethylenically unsaturated group on a side chain.

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A composition containing the compound of the Thepot et al reference is proven inferior in curability in comparison to a present composition as seen from the declaration by Mr. Yachi.

Applicants respectfully submit that their present inventions are novel over the Thepot et al. reference and would not have been obvious to a person of ordinary skill in the art over such reference.

Applicants respectfully submit they have responded in full to all matters raised in the Office Action. If the Examiner has any questions, please contact the undersigned to arrange for an interview.

Respectfully submitted,

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